Abstract of the Invention

A scheduler in, for example, an off-load engine
reports events for processing data frames to processing
engines. Each event to report has associated to it an event
information to report to a respective processing engine for
processing, for example, a data frame. Responsive to a prompt
having a specified time, a processor looks up the event
information to report at the specified time in one or more
memories. For each event information to report at the
specified time, at least some of the event information is
forwarded to the respective processing engine. A state machine
is used as the processor to implement functionality of the
scheduler in hardware thereby providing off-loading of
processing in the off-load engine from software to hardware.